

1. Solve the equation below. Then, choose the interval that contains the solution.

$$-5(-12x - 6) = -15(14x - 4)$$

- A. $x \in [-0.38, -0.32]$
 - B. $x \in [0.5, 1.22]$
 - C. $x \in [0.25, 0.44]$
 - D. $x \in [-0.08, 0.22]$
 - E. There are no real solutions.
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2. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Perpendicular to $3x - 7y = 6$ and passing through the point $(-4, -4)$.

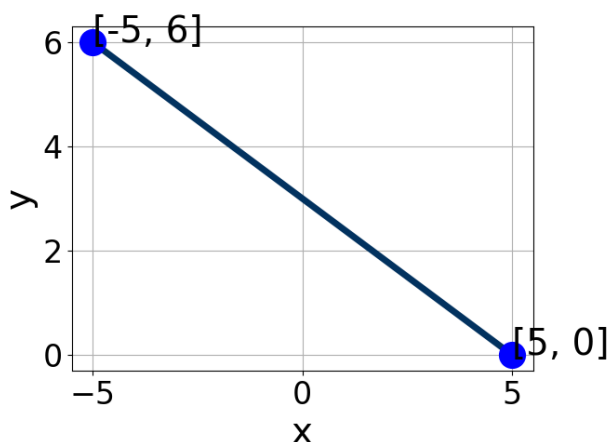
- A. $m \in [-2.6, -1.6]$ $b \in [-18.33, -11.33]$
 - B. $m \in [1.4, 3.4]$ $b \in [4.33, 13.33]$
 - C. $m \in [-1.3, 0.6]$ $b \in [-18.33, -11.33]$
 - D. $m \in [-2.6, -1.6]$ $b \in [-3, 3]$
 - E. $m \in [-2.6, -1.6]$ $b \in [9.33, 15.33]$
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3. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $5x + 7y = 11$ and passing through the point $(-8, -5)$.

- A. $m \in [0.26, 1.53]$ $b \in [-1.3, 2.8]$
- B. $m \in [-2.29, -0.89]$ $b \in [-13.3, -9.8]$
- C. $m \in [-0.83, -0.61]$ $b \in [9.8, 10.9]$
- D. $m \in [-0.83, -0.61]$ $b \in [1.3, 3.8]$
- E. $m \in [-0.83, -0.61]$ $b \in [-13.3, -9.8]$

4. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [1.1, 6.7]$, $B \in [4, 8]$, and $C \in [14, 21]$
- B. $A \in [0.4, 0.8]$, $B \in [1, 3]$, and $C \in [3, 6]$
- C. $A \in [1.1, 6.7]$, $B \in [-8, -4]$, and $C \in [-16, -13]$
- D. $A \in [-5.2, 0.2]$, $B \in [-8, -4]$, and $C \in [-16, -13]$
- E. $A \in [0.4, 0.8]$, $B \in [-4, 0]$, and $C \in [-3, -2]$

5. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{7x - 8}{5} - \frac{-4x - 7}{3} = \frac{6x - 9}{4}$$

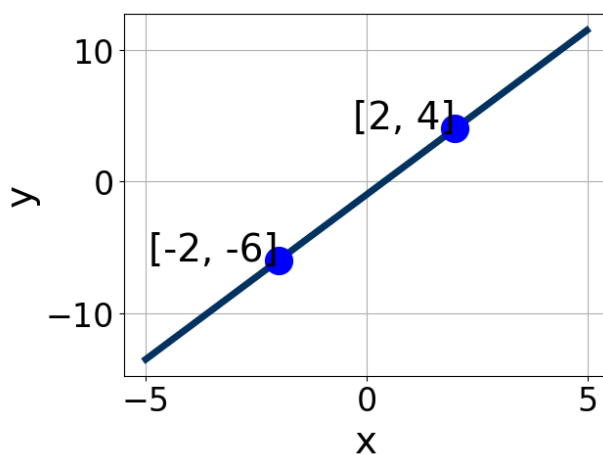
- A. $x \in [-0.5, 2.8]$
- B. $x \in [-8.1, -5.8]$
- C. $x \in [-1.1, 1.1]$
- D. $x \in [-3.4, -1]$
- E. There are no real solutions.

6. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(-4, -6) \text{ and } (8, -11)$$

- A. $m \in [-2.9, 0.3]$ $b \in [-3.5, 0.2]$
- B. $m \in [-2.9, 0.3]$ $b \in [6.7, 8.3]$
- C. $m \in [-0.4, 1]$ $b \in [-17, -13.7]$
- D. $m \in [-2.9, 0.3]$ $b \in [-22.3, -17]$
- E. $m \in [-2.9, 0.3]$ $b \in [-8.4, -6.1]$

7. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain A , B , and C .



- A. $A \in [1.2, 7.5]$, $B \in [-2.09, -1.98]$, and $C \in [1.77, 2.7]$
- B. $A \in [-8.3, -4.3]$, $B \in [1.68, 2.11]$, and $C \in [-2.34, -1.66]$
- C. $A \in [-3.3, -2]$, $B \in [0.56, 1.64]$, and $C \in [-1.47, 0.03]$
- D. $A \in [1.2, 7.5]$, $B \in [1.68, 2.11]$, and $C \in [-2.34, -1.66]$
- E. $A \in [-3.3, -2]$, $B \in [-1.39, -0.82]$, and $C \in [0.25, 1.12]$

8. Solve the equation below. Then, choose the interval that contains the solution.

$$-15(-9x - 12) = -4(-18x - 17)$$

- A. $x \in [3.66, 4.21]$
 - B. $x \in [-4.56, -3.75]$
 - C. $x \in [-2.55, -1.28]$
 - D. $x \in [-1.65, 0.08]$
 - E. There are no real solutions.
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9. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx + b$ and choose the intervals that contain m and b .

$$(11, 2) \text{ and } (9, -11)$$

- A. $m \in [4.5, 8.5]$ $b \in [-74.5, -67.5]$
 - B. $m \in [-14.5, -4.5]$ $b \in [46.5, 50.5]$
 - C. $m \in [4.5, 8.5]$ $b \in [-15, -6]$
 - D. $m \in [4.5, 8.5]$ $b \in [-20, -17]$
 - E. $m \in [4.5, 8.5]$ $b \in [65.5, 71.5]$
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10. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-5x + 4}{7} - \frac{6x - 3}{5} = \frac{-7x - 4}{4}$$

- A. $x \in [11.22, 16.22]$
- B. $x \in [65.96, 67.96]$
- C. $x \in [4.91, 8.91]$
- D. $x \in [0.54, 1.54]$
- E. There are no real solutions.

